



PRESS RELEASE

Solaris product novelties on Busworld 2017

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• **The premiere of the new generation electric bus - Solaris Urbino 18 electric** • **The new Solaris Urbino with a serial hybrid drive** • **The new generation of Urbino in MIDI class - Solaris Urbino 10,5**

At the press conference, during the biggest bus trade in the world – Busworld Kortrijk, Solaris has presented its **innovative low- and zero-emission vehicles, as well as a traditional propulsion driven bus of the new generation** – the premiere Urbino 18 electric, the new Urbino 12 with a serial hybrid drive and the new Solaris Urbino 10,5.

The “direction e-mobility” has been a key area of development for Solaris in the past years. This is evidenced by a growing number of supplied and ordered battery vehicles. By the middle of this year, Solaris had already sold nearly 200 buses with electric drives, while next year the envisaged number of electric buses produced reaches 300. That is why the producer is continuously developing its portfolio – during the Busworld, the company has presented the articulated version of new Solaris Urbino electric.

The new Solaris Urbino 18 electric

This year’s Busworld fair in Kortrijk will see the official début of the fourth-generation Solaris Urbino 18 electric. The product is based on the construction of the new generation Urbino that the passengers have already made an acquaintance with after its première in 2014. Up until now the new generation articulated bus variant has been available only with a diesel engine. As of this year, the Urbino family will gain a new member - the 18-metre zero-emission bus.

On display at the Kortrijk trade, the articulated electric bus will be fitted with a 240 kW central traction motor. Its energy storage system consists in 240 kWh batteries of the Solaris High Energy type. In the case of the model presented at Busworld, the batteries can be charged either by means of a plug-in connector or via a roof-mounted pantograph. In Kortrijk the company has also presented battery charging devices of polish producers – Ekoenergetyka and Medcom.

Owing to the reduced unladen weight of the vehicle and the advantageous distribution of axle load, the passenger capacity of the presented vehicle totals 140 people, which is – along with the interior design, battery capacity or the way these are recharged - one of the many options available to customers and fine-tuned to the expectations of carriers. All of these efforts are to make Solaris buses more functional and economical depending on existing conditions.

What is important for operators, the new-generation articulated Solaris Urbino electric 18 is not only a test version presented on trade fairs. Rather, it is a mature serial product. Even before the Busworld fair, the first copies of the new model made it to carriers. One of those who bought the new bus is the Cracow-based MPK to whom Solaris has supplied 20 electric buses in total this summer. Seventeen of these were 12 meters long; the three remaining ones were articulated buses. One of them is truly exceptional - that is bus number 15,000 to have rolled out of the Solaris factory in Bolechowo.

The articulated electric bus has all the best technical solutions from the New Urbino 12 electric, awarded with prestigious title 'Bus of the Year 2017'. Its light and rigid body frame, skin-on-skin panels assembly as well as ergonomic, spacious interior in combination with an exquisitely quiet and clean motor is the Solaris' newest respond to the growing need for the zero-emission vehicles in public transport.

The new Solaris Urbino 12 Hybrid

The supplier of the hybrid unit HybriDrive is an American manufacturer – BAE Systems. The environmental-friendly drive allows to significantly reduce fuel consumption and pollutant emission into the atmosphere. It is made possible by an electric engine fueled with power from a power storage facility. That facility, in turn, is charged with the help of a generator using a 4.5 litres Cummins 210 HP Cummins ISB4.5E6 diesel engine.

The new Solaris hybrid Urbino 12 is also available as a zero emission option, which makes the vehicle like an electric bus. Thanks to the installation of the Stop-and-Go system, the diesel engine turns off completely during stopovers at bus stops and the opening of doors, but it turns on again immediately after the supercapacitors run out of power. A GPS has been installed in the vehicle, too, including corresponding software that allows for the activation of the Arrive-and-Go function. This option allows to switch off the diesel engine even as the bus is approaching a bus stop. Various tests have shown that thanks to this environmental-friendly solution the bus is able to use up to 20 percent less fuel than similar vehicles with a conventional drive would use. Moreover, the engine operates so quietly that the noise level can be reduced significantly, which comes in handy in particular in crowded city centers.

As of recently Solaris' new offer also includes an 18-metre version of the producer's hybrid bus with a BAE serial drive. The bus is equipped with a six-cylinder, 6.7-litre, 300 HP Cummins ISB6,7 engine, as well as an asynchronous central motor with a peak performance of 200 kW.

The new Urbino 12 Hybrid boasts exceptional drive parameters, but what makes it stand out particularly is the forceful and yet smooth acceleration. One of the main features of the drive is that it can recuperate kinetic energy during braking and this energy is subsequently transformed and stored as electric power in a storage facility – in 0.82 kWh supercapacitors.

The new Solaris Urbino 10,5

The main advantages of that bus are its small external dimensions and its excellent maneuverability thanks to which it is extremely effective both in small towns, as well as on the narrow, cramped streets of many European metropolises. The vehicle was built on the basis of a 12-meter Solaris modules, but it has been shortened by 1.5 meters between the first door of and the second axle compared to the new Urbino 12. Shortening the construction of the bus required also a reduction of the wheelbase from 5,900 mm to 4,450 mm.

A 209 horsepower Cummins ISB6.7E6C engine has been installed in the model showcased at the fair. However, just like in the diesel Urbino 12, it is possible to install a DAF MX11 drive unit instead. Both solutions guarantee dynamic and economical driving. The engines meet highly restrictive Euro 6 emissions standards.

In spite of its small external dimension, the bus is doing very well on busier routes, too, with its 23 seats, six of which can be accessed from the low floor. The passengers' comfort during a ride is ensured by a highly efficient air conditioning system, modern LED lighting (amber-colored) and USB ports for charging mobile devices, located in the handrails.

Three Solaris Urbino 10.5 buses started cruising around Vienna this year. More vehicles are already lined up on the assembly line - they are being produced specifically for the Polish cities of Komorniki and Kutno, but also for Fürth in Germany and French Abondance. A picturesquely located town, the latter will be able to witness the advantages of the new Solaris Urbino 10.5 on winding and steep mountain roads.

Additional information

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About our company

Solaris Bus & Coach sp. z o.o. is one of the leading producers of city and intercity buses in Europe. It focuses in particular

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on the development of zero-emission vehicles, i. e. electric and hydrogen buses as well as trolleybuses. This has resulted in the widest zero-emission product range in the European market and a leading position in this segment with a market share of 15.2%. Nearly 25,000 Solaris vehicles have been delivered so far and they ply the streets in 850 towns and cities across 33 countries located throughout Europe as well as beyond it. Solaris is part of the Spanish CAF Group (Construcciones y Auxiliar de Ferrocarriles) S.A. From conception, to the design and manufacturing phases, all Solaris buses are produced in Poland. Moreover, all activities undertaken by the manufacturer are in line with the brand's mission, which is reflected in the motto "We are changing the image of public transport". Solaris also actively partners with public transport operators and provides them with comprehensive support in their transition to zero-emission mobility.